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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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In the Matter of

Federal Communications Commission
Office of Secretary

Amendment of Part 95 of the)
Commission's Rules to Allow)
Interactive Video and Data)
Service Licensees to Provide)
Mobile Service to Subscribers)

WT Docket No. 95-47

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COMMENTS OF THE NATIONAL ASSOCIATION OF
BROADCASTERS ON PETITIONS FOR
RECONSIDERATION/CLARIFICATION

I. INTRODUCTION AND SUMMARY

The National Association of Broadcasters ("NAB")¹ submits these comments in response to the petition for reconsideration filed by Euphemia Banas, et. al., ("Euphemia")² and the joint request for clarification filed by ITV, Inc. ("ITV") and IVDS Affiliates, LC ("IALC")³ in the above-captioned proceeding.

This proceeding was inaugurated on May 5, 1995, in response to a petition filed by EON Corporation ("EON").⁴ The Commission's *Notice of Proposed Rule Making* ("*Notice*")⁵ sought comment on several significant potential changes to the technical and operational aspects of the Interactive Video and Data Service ("IVDS"). The *Notice*

¹ NAB is a nonprofit, incorporated association of radio and television stations and networks which serves and represents the American broadcast industry.

² The joint petitioners include: Euphemia Banas, TransPacific Interactive, Inc. Wireless Interactive Return Path, L.L.C., New Wave Communications, L.L.C., Loli, Inc., Multimedia Computer Communication, Inc., KMC Interactive TV Inc., Southeast Equities, Inc. Robert H. Steele, MAR Partnership, IVDS On-Line Partnership, A.B.R. Communications Inc. IVIDCO, L.L.C., Vision TV, Dunbar TV, Corp., and Legacy TV, Inc. .

³ Letter by Mr. William J. Franklin, dated August 13, 1996, to the Chief of the FCC's Wireless Telecommunications Bureau.

⁴ The EON petition, filed May 11, 1994, was assigned the file number RM-8476 by FCC *Public Notice* released May 19, 1994 (Report No. 2011).

⁵ *Notice of Proposed Rule Making* in WT Docket No. 95-47, 10 FCC Rcd 4981 (May 5, 1995).

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asked whether the FCC should amend Part 95 of the Rules to allow IVDS licensees to provide mobile service to subscribers on an “ancillary” basis. The *Notice* also raised issues concerning power limits, “duty cycles” and communications among various IVDS facilities.

On July 11, 1995, NAB filed reply comments in this proceeding, emphasizing that prevention of interference to television Channel 13 should be of overriding importance as the Commission evaluated its proposed modifications to the IVDS rules. NAB argued, among other things, that the Commission should maintain a 100 milliwatt power limit on portable response transmitter units (“RTUs”) but that fixed RTUs, in some cases, could remain at their 20 watt limit, provided that the Commission retained its five-seconds-per-hour “duty cycle” limitation for both.

Additionally, the NAB reply comments urged the Commission to reject regulatory alternatives that would diminish the ability of consumers to employ the IVDS for the purposes for which it was created: an interactive service tied to over-the-air broadcasting.

In a petition for partial reconsideration filed on July 25, 1996, NAB addressed those portions of the Commission’s *Report and Order*⁶ that were at odds with the position taken by NAB in its reply comments. The NAB petition recommended, *inter alia*, that the Commission revise its decision concerning power limit measurement and duty cycle applicability, and that the agency clarify those portions of its decision that deal with the ancillary mobile use of IVDS operations as well as the “status” of certain CTS operations.

⁶ See *Report and Order* in WT Docket No. 95-47, FCC 96-224, released May 30, 1996, 61 Fed. Reg. 32710 (June 25, 1996).

The Euphemia and ITV/IALC petitions have taken positions contrary to those espoused by NAB in our reply comments and in our petition for partial reconsideration. We address these other parties' petitions, below.

We disagree with the assertions by Euphemia that the effective radiated power ("ERP") for mobile response transmitter units ("RTUs") should be allowed to have a one-watt maximum. The 100-milliwatt limit should be the absolute maximum allowed; it also should be a "peak power" limit. We also disagree with the request from ITV/IALC to allow interconnection with the Public Switched Network ("PSN") for the purpose that they describe.

II. EUPHEMIA'S POWER LIMIT INTERPRETATION MUST BE REJECTED

Euphemia embraces an interesting interpretation of the rules by contrasting power limits for RTUs and cell transmitter stations ("CTSs") when both are within the Grade B contour of a TV channel 13 service area⁷. The Commission's rules state that the maximum power for an IVDS system must be limited as a function of the location within or near the Channel 13 service area. Lower maximum powers are mandated near the Grade B contour, as compared to higher limits when the sites are more distant or closer to the Channel 13 transmitter. NAB's interpretation is that the table in that rule showed the applicable power limits, as the language in the paragraph clearly applies these values to both the RTU and the CTS, and the Rules clearly state that minimum power for

⁷ See 47 C.F.R. § 95.855(b)

communication always must be used, independent of the location within the TV channel service area.

While in our petition for partial reconsideration NAB expressed concerns about potential misreading or misunderstanding of the rules, and the related need for clarity, we did not note the ambiguity discovered by Euphemia. The Commission should clarify the rules in all ambiguous areas.

Although further lowering the allowed maximum power for both RTU and CTS units would be preferable, the Commission has, in previous rule makings, decided that protection of consumers from the interference to their television sets, when tuned to Channel 13, can be provided by requiring a notification process to those potentially affected. Such notification is to be followed by the IVDS operator rectifying the interference situation when it occurs.⁸ Although we do not believe this is the preferred approach to controlling interference, NAB has not and does not now request reconsideration of that portion of the FCC's rules. NAB believes that the allowed power for fixed RTUs still has significant potential to produce interference, even with the requirement to only use the minimum power and maximum duty cycle. While this protection solution is yet to be verified on a larger, practical scale, it should be noted that the interference situation for fixed RTUs is at least static, such that when the interference does exist it can generally be viewed by a technician visiting the consumer's residence.

The mobile case is very different, in that mobile RTUs will affect different locations each time they transmit (in areas where the Channel 13 signals are not strong). Even the conscientious IVDS operator may have difficulty fixing a problem that is not

⁸ See 47 C.F.R. § 95.861.

there when a residence is visited in response to a complaint. Mobile RTUs can cause interference that is comparable to that from a CTS, since they can be closer to TV sets. The 100 milliwatt (peak) level for a mobile RTU is consistent with the levels stated in Section 95.855 of the Rules, for approximately equivalent interference protection when the distances are taken into consideration. A one-watt ERP signal (the maximum power allowed near the Grade B contour edge) creates the same signal strength at a 200-foot distance as a 100-milliwatt ERP signal does at about a 63-foot distance. Installation of filters on all residences in the service area would be a poor⁹ alternative remedy if the higher powers requested by Euphemia could be justified for mobile RTUs. A mere reference¹⁰ to field tests performed by one of an IVDS licensee's engineers hardly represents solid justification, especially in light of the fact that this report was not even included for analysis and review in the petition for reconsideration.

Of course, if such an IVDS service became extremely successful, the number of mobile RTUs in the marketplace would increase many fold, and the cumulative intermittent interference easily could cause significant damage to consumers' enjoyment of Channel 13 signals, which may lead to necessary installation of filters on television receivers throughout the channel 13 service area. It is unreasonable to expect consumers to recall having received the notice announcing the presence of the IVDS system and to recognize that the IVDS service may be the cause of such intermittent interference. This mobile RTU-based interference does not correlate with the "turn-on" of the service, but

⁹ Filtering (without proper amplification) degrades the inband signal quality as well. Even with proper amplification this is undesirable, as the addition of amplifiers would increase the cost to the IVDS operator.

¹⁰ See Euphemia petition at 4.

rather can occur intermittently many months or even years later. Accordingly, a limit of 100 milliwatts peak power, along with a duty cycle requirement, is justified to minimize this “difficult-to-isolate-and-solve” and “possible-to-refute”¹¹ interference problem.

The Commission certainly must correct the rule language that permitted Euphemia to believe--mistakenly--that 20 watts is permitted for a fixed RTU within and near a channel 13 Grade B contour. In NAB’s petition for partial reconsideration,¹² we pointed out that the rules could be misconstrued, and the Euphemia petition is an example of such misunderstanding of the intent of the Commission’s rules.

NAB also takes exception to the proffered conclusion that 60% of the television audience receives its signal through cable.¹³ While household penetration of cable is near that value, seldom are all the sets in a household connected to a cable system. Some are connected to an outdoor antenna and others may be small portable sets with the built-in “rabbit ears.” These sets remain vulnerable to direct pickup interference from IVDS.

III. THE COMMISSION SHOULD AFFIRM ITS REJECTION OF IVDS INTERCONNECTION WITH THE PUBLIC SWITCHED NETWORK

ITV and IALC request clarification of the rules related to interconnection to the PSN. ITV/IALC propose use of the PSN as a return path from RTUs. But such an approach is completely inconsistent with the original purpose of IVDS -- to provide a

¹¹ Even if a consumer were astute enough to notice that intermittent interference to Channel 13 had increased, and felt that the IVDS was a potential cause, only if this consumer were persistent and knowledgeable would it be likely that anything would be done to correct the problem. An IVDS license unwilling to take responsibility for the interference likely would try to point to other sources of intermittent noise as the cause of the problem.

¹² NAB petition for partial reconsideration, supra at 3.

¹³ See Euphemia petition at 8.

return path from service locations to enable interactive enhancement of broadcast material. NAB continues to oppose this concept of interconnection as one which would reduce significantly the availability of IVDS operations to serve the original purpose for the service.¹⁴ The Commission should reaffirm its decision to not allow interconnection to the PSN.

NAB is also concerned with the increased interference potential of such an interconnection arrangement, as suggested by ITV/IALC. The interconnect wire between the RTU and the PSN can, without proper design and installation precautions, act as an antenna. Further, the configuration of such wiring is not predictable. Any interconnection of RTUs to the wireline network in a subscriber's premise would need to be coupled with a requirement for testing of such devices for emission levels, as installed, or development of an appropriate certification program for RTU equipment compliance with emission limits and minimum operating levels, to ensure a suitable safety factor.¹⁵

IV. CONCLUSION

If the Commission takes further action with respect to power limits for fixed RTUs, *it should further limit them to reflect the comparable field strength reflected by closer placement to homes.* The Commission also should specify the limit for RTU transmissions as a "peak power" measurement. Moreover, the Commission should not allow RTU connection to the PSN for transmission of any data which originates from, or ends at, the consumer. The Commission also should correct its rules to reflect more

¹⁴ See NAB reply comments, supra at 2.

¹⁵ Test and measurement procedure details are important, and would have to be based on real installed field test data.

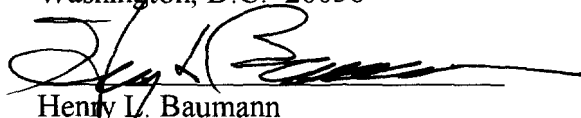
precisely the Commission's intent where the parties have pointed out differing interpretations.

Respectfully submitted,

**NATIONAL ASSOCIATION OF
BROADCASTERS**

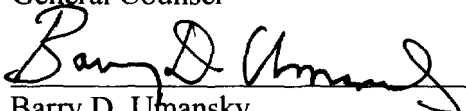
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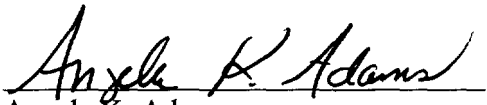
August 28, 1996

CERTIFICATE OF SERVICE

I, Angela K. Adams , hereby certify that on this, the 28th day of August, 1996, a copy of the foregoing Comments of the National Association of Broadcasters on Petitions For Reconsideration/Clarification were mailed first class, postage prepaid to the following:

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